



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

REGION 4

ATLANTA FEDERAL CENTER  
61 FORSYTH STREET  
ATLANTA, GEORGIA 30303-8960

June 24, 2008

Dawn Schroeder  
Naval Sea Systems Command  
Department of the Navy  
1333 Isaac Hull Avenue  
Washington Navy Yard, D.C. 20376-2101

SUBJECT: Final Environmental Impact Statement/Overseas Environmental Impact Statement  
for the Shock Trial of the MESA VERDE (LPD 19); CEQ Number 20080207

Dear Ms Schroeder:

The U.S. Environmental Protection Agency (EPA) has reviewed the referenced Final Environmental Impact Statement (EIS) in accordance with its responsibilities under Section 309 of the Clean Air Act and Section 102(2)(C) of the National Environmental Policy Act. The U.S. Department of the Navy (Navy) proposes to conduct a full ship shock trial testing on the MESA VERDE (LPD 19), a new amphibious transport dock ship, in the summer of 2008. Three testing locations were considered: offshore of Naval Station (NAVSTA) Norfolk, Virginia; offshore of NAVSTA Mayport, Florida; and offshore of Naval Air Station Pensacola, Florida. The preferred alternative is to conduct the shock trial offshore of NAVSTA Mayport.

Our November 9, 2007, comment letter on the Draft EIS was not included in the Final EIS, nor does it appear that our comments were addressed. We resubmit these comments (attached) for your consideration. In particular, EPA reiterates the recommendation to distribute post-testing monitoring results to state and federal natural resource agencies for review and analysis to assess the success of the proposed mitigation measures. Based on the mitigation and monitoring programs described in the Final EIS, EPA has no additional concerns related to this project. EPA recommends inclusion of these commitments in the Record of Decision (ROD) for the project. We appreciate the opportunity to review the proposed action. Please contact Ben West of my staff at (404) 562-9643 if you have any questions or want to discuss our comments further.

Sincerely,

A handwritten signature in black ink, appearing to read "Heinz J. Mueller", is positioned above the typed name.

Heinz J. Mueller, Chief  
NEPA Program Office  
Office of Policy and Management

Enclosure

cc: Booz Allen Hamilton – MESA VERDE Shock Trial



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November 9, 2007

Mesa Verde Shock Trial  
Booz Allen Hamilton  
Maritime Plaza, 1201 M St, SE  
Washington, D.C. 20003

Attn: Mr. Don Shaver, Naval Sea Systems Command, NAVSEA 04RE

Subject: Draft Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS), for the Shock Trial of the Mesa Verde (LPD 19)

Dear Sir:

Pursuant to Section 309 of the Clean Air Act and Section 102 (2)(C) of the National Environmental Policy Act, EPA, Region 4 has reviewed the draft EIS which evaluates the environmental consequences of full ship shock trial testing on the Mesa Verde (LPD 19), a new amphibious transport dock ship. Three testing locations were considered: offshore of Naval Station Norfolk, Virginia; offshore of Naval Station Mayport, Florida; and offshore of Naval Air Station Pensacola, Florida. Shock testing is a method whereby a series of underwater explosive charges and a ship are brought closer together. With each detonation the severity of the shock increases. This gradation in severity allows the Navy to fully assess the ship's survivability from shock waves propagated by underwater explosions. Testing explosions will occur at a rate of one detonation per week for three weeks. A fourth detonation may be performed if the first three tests fail to provide technically acceptable data. This sequencing allows time to perform interim detailed inspection of the blast effects on the ship's systems. Because the Navy asserts that computer simulations are not adequate to provide data on survivability of the ship's hull and electronics, live-fire explosions are employed for these assessments. The preferred testing site alternative is Mayport, during spring/summer, 2008.

**Potential Impacts on Protected Species** – Protected marine mammal species known to occur in the area offshore of Mayport comprise up to 29 marine mammal species, including sperm whale, dwarf and pygmy sperm whale, four species of beaked whale, and 15 species of dolphin and porpoise. While death or injury may occur as a result of the explosive blasts, the Navy anticipates few lethal takes of protected species will occur as a result of these detonations. Model predictions for estimated exposures of marine mammals indicate that the Mayport site may experience, during spring/summer, approximately one mortality, eight physical harassments (injuries), and 498 behavioral harassments. Sea turtles takes during spring/summer were estimated to be up to one mortality, eight physical harassments (injuries), and 498 behavioral harassments. The draft EIS states that injury from exposure to the chemical by-products released into the surface waters is not likely to occur, and no permanent alteration of marine mammal habitat is expected to occur.

**Mitigation** - The document provided mitigation strategies that would minimize risk to marine mammals and sea turtles. The Navy proposes to (1) conduct pre-detonation aerial surveys and select a test area within the chosen site location with the lowest number of marine mammals and sea turtles; (2) monitor the area visually before each test and postpone detonation if any marine mammal is detected within a range that has a potential to cause injury; and (3) monitor the area after each test to locate any injured animals. If post-detonation monitoring shows that marine mammals were killed or injured as a result of the test, testing would be halted until procedures for subsequent detonations could be reviewed and changed as necessary. The National Marine Fisheries Service (NMFS) may propose and require additional mitigation through its rulemaking and Endangered Species Act (ESA) consultation process, which are ongoing at this time, and should be finalized prior to testing.

**Conclusions and Recommendations** - EPA concludes that the Navy has used a rational process to select the optimum site and seasons of the year to minimize impacts on protected marine species. With implementation of the proposed monitoring and safety precautions described in the draft EIS, it appears that Mayport is the most favorable for the protection of marine fauna of the three proposed alternative sites. The nature of the testing makes it impossible to avoid some risk to avian/marine species likely to be present within the test area; nonetheless, all reasonable efforts should be made to minimize losses.

EPA understands that protective measures being proposed for the Mesa Verde is modeled after the mitigation plan that was defined in the Final Rule for the USS Winston S. Churchill Final EIS issued by NMFS in 2001, and proved satisfactory in protecting marine mammals and turtles. Post-testing monitoring results could be made available to state and federal natural resource agencies for review and analysis to assess how successful these mitigation measures were. This assessment could also be useful in ascertaining both short- and long-term impacts to biota in test areas in the event the Navy conducts similar trials on other major new vessels in the future.

Thank you for the opportunity to review this document. EPA rates this action EC-1, that is, we have a degree of environmental concern regarding the proposal; however, the document contained sufficient information for our review. If this office can be of further assistance in this matter, John Hamilton (404-562-9617) will serve as initial point of contact.

Sincerely,

A handwritten signature in black ink, appearing to read "Heinz J. Mueller", with a stylized flourish at the end.

Heinz J. Mueller, Chief  
NEPA Program Office